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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,939	01/15/2002	Akihiko Suehiro	217958US3PCT	4107

22850 7590 12/12/2003

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ALEXANDRIA, VA 22314

EXAMINER

DUNN, DAVID R

ART UNIT PAPER NUMBER

3616

DATE MAILED: 12/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,939

Applicant(s)

SUEHIRO ET AL.

Examiner

David Dunn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2 and 5-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 5-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

This Office Action is responsive to the amendment filed 10/20/03 in which claims 3 and 4 were canceled and new claim 8 was added.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claim 8 is rejected under 35 U.S.C. 102(e) as being anticipated by Cabrera et al. (6,123,359).

Cabrera et al. discloses a gas generator (10; see Figure 3) comprising: a housing comprising an upper lid (12) and a lower lid (22) joined together, the upper lid having a bowl shape and provided with a plurality of gas discharge holes ("gas exit portals", column 5, line 43),

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the lower lid having a bowl shape having a side cylinder portion and a bottom plate having a thickened wall portion (see attachment), the lower lid including an ignitor holding portion (see attachment) formed integrally with the bottom plate on the thickened wall portion; an ignitor (18; see also Figure 1) held by the ignitor holding portion in a center portion of the single cylinder housing; and a plurality of gas generating devices (30; "gas generant pellets", column 5, line 40) provided around the ignitor in the single cylinder housing.

Cabrera et al. shows the ignitor held by the ignitor holding portion by caulking (20). Cabrera et al. shows the ignitor holding portion comprising an inner cylindrical portion for holding the ignitor, a protruding portion from the inner cylindrical portion and a bending portion extending from the inner portion (see Figure 3). The Length to Diameter ratio is less than 1. The gas generating agent is a nitrogen (N) containing organic compound (carbon); see column 4, lines 40-65.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 5-7 rejected under 35 U.S.C. 103(a) as being unpatentable over Cabrera et al. in view of Katsuda et al.

Cabrera et al. is discussed above and fails to show the housing made of steel.

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Katsuda et al. teaches a similar gas generator comprising a housing made of steel (column 9, lines 30-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cabrera et al. with the teachings of Katsuda et al. in order to provide a cheaper material for the housing.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cabrera et al. in view of Katsuda et al. as applied above, and further in view of Osborne et al. (5,531,474).

The combination of Cabrera et al. and Katsuda et al. is discussed above and fails to show a flange extending from the upper lid.

Osborne et al. shows an inflator with an upper lid (12) having a flange (30) extending vertically outward therefrom.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Cabrera et al. and Katsuda et al. with the teachings of Osborne et al. in order to easily attach the gas generator to the air bag module.

Response to Arguments

6. Applicant's arguments filed 10/20/03 have been fully considered but they are not persuasive. Applicant's arguments on page 6 regarding the 112, 2nd paragraph rejection are now moot as this rejection has been withdrawn.

On pages 7 and 8, applicant argues the Katsuda et al. reference, however these arguments regarding the 103 rejection with Katsuda as the base reference are moot, as this rejection has

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been withdrawn. The 103 rejection of Cabrera in view of Katsuda is maintained. Regarding this rejection, Katsuda is only relied upon for the teaching of the use of steel.

On page 8, applicant argues that Cabrera et al. does not disclose the "thickened portion" on the second housing member. In response, the examiner has attached a copy of Figure 3 of Cabrera to show specifically the portion of the second housing member which is thickened (i.e., the portion surrounding the ignitor).

On page 8, applicant also provides arguments regarding Osborne et al., however it is noted that Osborne is merely relied upon in the rejection of claim 2 to show a flange.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Dunn whose telephone number is 703-305-0049. The examiner can normally be reached on Mon-Thur, alt. Fridays, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-1113.



DAVID R. DUNN
PATENT EXAMINER



PAUL N. DICKSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

12/11/03

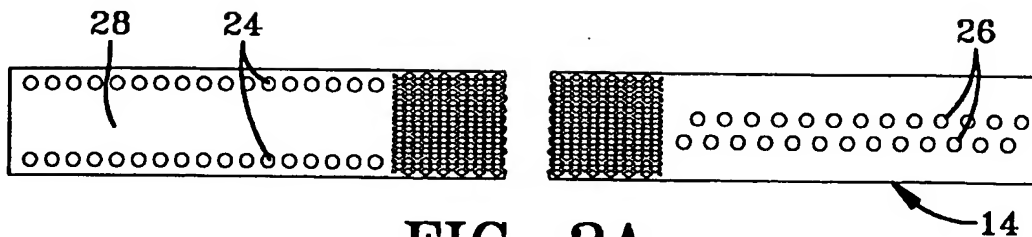


FIG-2A

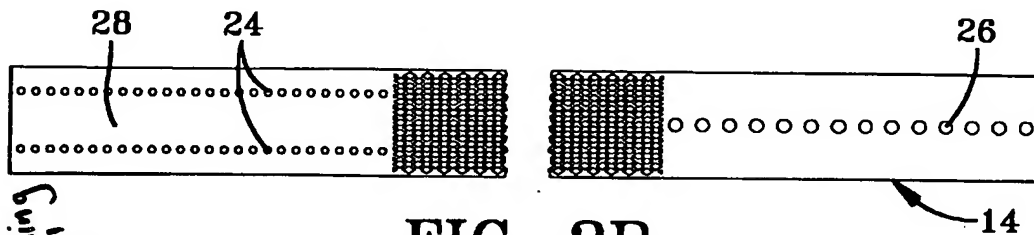


FIG-2B

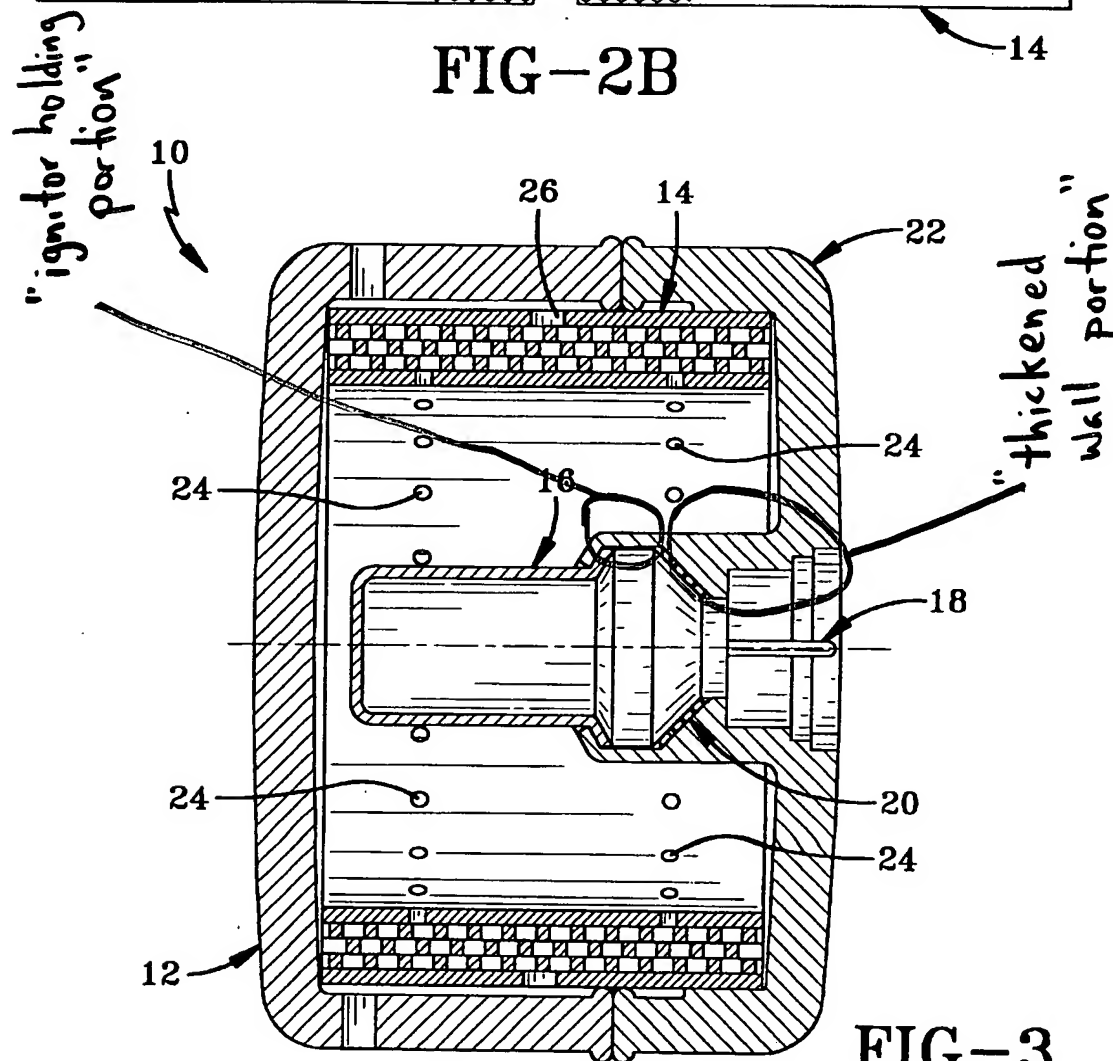


FIG-3